



SEQUENCE LISTING

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YOUNG, ANDREW A.

<120> NOVEL EXENDIN AGONIST FORMULATIONS AND METHODS OF ADMINISTRATION
THEREOF

<130> 249/146US

<140> 09/889,330

<141> 2001-12-27

<150> PCT/US00/00902

<151> 2000-01-14

<150> US 60/116,380

<151> 1999-01-14

<150> US 60/175,365

<151> 2000-01-10

<160> 189

<170> PatentIn Ver. 3.2

<210> 1

<211> 39

<212> PRT

<213> Heloderma horridum

<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 1

His	Ser	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala	Pro	Pro	Pro	Ser
			35			

<210> 2

<211> 39

<212> PRT

<213> Heloderma suspectum

<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 2

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 3

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic construct

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<223> His, Arg or Thr

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<221> VARIANT

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<223> Ser, Gly, Ala or Thr

<220>

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<222> (3)

<223> Asp or Glu

<220>

<221> VARIANT

<222> (6)

<223> Phe, Tyr or naphthalanine

<220>

<221> VARIANT

<222> (7)

<223> Thr or Ser

<220>

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<223> Ser or Thr

<220>

<221> VARIANT

<222> (9)

<223> Asp or Glu

<220>

<221> VARIANT

<222> (10)
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 <220>
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 <222> (22)
 <223> Phe, Tyr or naphthalanine

 <220>
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 <220>
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 <222> (24)
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 <220>
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 <222> (25)
 <223> Trp, Phe, Tyr or naphthylalanine

 <220>
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 <222> (31)
 <223> independently Pro, homoproline, 3-hydroxyproline,
 4-hydroxyproline, thioproline, N-alkylglycine,
 N-alkylpentylglycine or N-alkylalanine

 <220>
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 <222> (36)..(38)
 <223> independently Pro, homoproline, 3-hydroxyproline,
 4-hydroxyproline, thioproline, N-alkylglycine,
 N-alkylpentylglycine or N-alkylalanine

 <220>
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 <222> (39)
 <223> Ser, Thr or Tyr

 <220>
 <223> c-term is -OH or NH₂, with the proviso that the compound
 does not have the formula of either SEQ ID NOS 1 or 2

 <400> 3
 Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu Lys Asn Gly Gly Xaa Ser
 20 25 30

Ser Gly Ala Xaa Xaa Xaa Xaa
35

<210> 4

<211> 38

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<220>

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<223> Asp or Glu

<220>

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<222> (5)

<223> Ala or Thr

<220>

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<223> Ala, Phe, Tyr or naphthylalanine

<220>

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<220>

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<220>

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<222> (9)

<223> Asp or Glu

<220>

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<220>
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<222> (12)
<223> Ala or Lys

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<220>
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<220>
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<223> Ala or Val

<220>
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<223> Ala or Arg

<220>
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<220>
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<222> (24)
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<220>
<221> VARIANT

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<222> (25)
<223> Ala, Trp, Phe, Tyr or naphthylalanine

<220>
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<220>
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<222> (27)
<223> Ala or Lys

<220>
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<222> (28)
<223> Ala or Asn

<220>
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<222> (31)
<223> Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
      N-alkylpentylglycine or N-alkylalanine

<220>
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<222> (36)..(38)
<223> Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
      N-alkylpentylglycine or N-alkylalanine

<220>
<223> residues 29-38 may or may not be present according to the
      specification as filed; c-term is -OH or NH2

<400> 4
Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1             5             10             15
Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
      20             25             30
Ser Gly Ala Xaa Xaa Xaa
      35

<210> 5
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
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<222> (1)
<223> His, Arg, Tyr, Ala, norvaline, Val, or norleucine

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<220>
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<222> (2)
<223> Ser, Gly, Ala, or Thr

<220>
<221> VARIANT
<222> (3)
<223> Ala, Asp, or Glu

<220>
<221> VARIANT
<222> (4)
<223> Ala, norvaline, Val, norleucine or Gly

<220>
<221> VARIANT
<222> (5)
<223> Ala or Thr

<220>
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<222> (6)
<223> Phe, Tyr or naphthylalanine

<220>
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<223> Thr or Ser

<220>
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<222> (8)
<223> Ala, Ser or Thr

<220>
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<223> Ala, Norvaline, Val, Norleucine, Asp or Glu

<220>
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<222> (10)
<223> Ala, Leu, Ile, Val, pentylglycine or Met

<220>
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<222> (11)
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<223> Ala or Lys

<220>
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<222> (13)
<223> Ala or Gln

<220>
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<223> Ala, Leu, Ile, pentylglycine, Val or Met

<220>
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<222> (15)..(17)
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<220>
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<223> Ile, Val, Leu, pentylglycine, tert-butylglycine or
Met

<220>
<221> VARIANT
<222> (24)
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<220>
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<222> (25)
<223> Ala, Trp, Phe, Tyr or naphthylalanine

<220>
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<222> (26)
<223> Ala or Leu

<220>
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 <223> Ala or Lys

<220>
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 <222> (28)
 <223> Ala or Asn

<220>
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 <223> Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
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<220>
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 <223> Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
 N-alkylpentylglycine or N-alkylalanine

<220>
 <223> residues 29-38 may or may not be present according to the
 specification as filed; c-term is -OH or NH₂

<400> 5
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa Xaa Xaa
 35

<210> 6
 <211> 30
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<220>
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<400> 6
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
 20 25 30

<210> 7
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>

<223> synthetic construct

<220>

<221> MOD_RES

<222> (30)

<223> AMIDATION, Position 30 is Gly-NH2

<400> 7

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly
			20					25					30

<210> 8

<211> 28

<212> PRT

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<220>

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<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 8

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Ala	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 9

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic construct

<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 9

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser Gly Ala Pro Pro Pro Ser
35

<210> 10
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<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 10
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 11
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 11
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 12
<211> 39
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic construct

<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 12

Tyr Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 13

<211> 39

<212> PRT

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<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Tyr-NH2

<400> 13

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Tyr
35

<210> 14

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

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<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 14

His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 15

<211> 39

<212> PRT

<213> Artificial Sequence

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<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<220>

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<222> (6)

<223> Xaa is naphthylalanine

<400> 15

His Gly Glu Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 16

<211> 39

<212> PRT

<213> Artificial Sequence

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<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 16

His Gly Glu Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 17
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
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 <222> (39)
 <223> AMIDATION, Position 39 is Ser-NH2

<400> 17
 His Gly Glu Gly Thr Phe Ser Thr Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 18
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<220>
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 <222> (39)
 <223> AMIDATION, Position 39 is Ser-NH2

<400> 18
 His Gly Glu Gly Thr Phe Thr Thr Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 19
 <211> 39

<212> PRT
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<220>
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<220>
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 <222> (39)
 <223> AMIDATION, Position 39 is Ser-NH2

<400> 19
 His Gly Glu Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro Ser
 35

<210> 20
 <211> 39
 <212> PRT
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<220>
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 <222> (10)
 <223> Xaa is pentylglycine

<400> 20
 His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro Ser
 35

<210> 21
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
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 <222> (39)
 <223> AMIDATION, Position 39 is Ser-NH2

<220>
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 <222> (10)
 <223> Xaa is pentylglycine

<400> 21
 His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 22
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
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 <222> (39)
 <223> AMIDATION, Position 39 is Ser-NH2

<220>
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 <222> (14)
 <223> Xaa is pentylglycine

<400> 22
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 23
 <211> 39
 <212> PRT
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<220>

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<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<220>

<221> VARIANT

<222> (14)

<223> Xaa is pentylglycine

<400> 23

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 24

<211> 39

<212> PRT

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<220>

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<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<220>

<221> VARIANT

<222> (22)

<223> Xaa is naphthylalanine

<400> 24

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 25

<211> 39

<212> PRT
 <213> Artificial Sequence

<220>
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 <221> MOD_RES
 <222> (39)
 <223> AMIDATION, Position 39 is Ser-NH2

<400> 25
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Val Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro Ser
 35

<210> 26
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
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 <222> (39)
 <223> AMIDATION, Position 39 is Ser-NH2

<400> 26
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Val Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro Ser
 35

<210> 27
 <211> 39
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<220>
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<222> (23)
 <223> Xaa at Position 23 is tertiary-butylglycine

<220>
 <221> MOD_RES
 <222> (39)
 <223> AMIDATION, Position 39 is Ser-NH2

<400> 27
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro Ser
 35

<210> 28
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <221> VARIANT
 <222> (23)
 <223> Xaa at position 23 is tertiary-butylglycine

<220>
 <221> MOD_RES
 <222> (39)
 <223> AMIDATION, Position 39 is Ser-NH2

<400> 28
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro Ser
 35

<210> 29
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 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
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 <222> (39)
 <223> AMIDATION, Position 39 is Ser-NH2

 <400> 29
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

 Glu Ala Val Arg Leu Phe Ile Asp Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

 Ser Gly Ala Pro Pro Pro Ser
 35

 <210> 30
 <211> 39
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 <213> Artificial Sequence

 <220>
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 <222> (39)
 <223> AMIDATION, position 39 is Ser-NH2

 <400> 30
 His Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

 Ser Gly Ala Pro Pro Pro Ser
 35

 <210> 31
 <211> 39
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic construct

 <220>
 <221> VARIANT
 <222> (31)
 <223> Xaa at position 31 is thioproline

 <220>
 <221> VARIANT
 <222> (36)..(38)
 <223> Xaa at positions 36, 37, and 38 is thioproline

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<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 31
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1             5             10             15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
      20             25             30

Ser Gly Ala Xaa Xaa Xaa Ser
      35

<210> 32
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is thioproline

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 32
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1             5             10             15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
      20             25             30

Ser Gly Ala Xaa Xaa Xaa Ser
      35

<210> 33
<211> 39
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<213> Artificial Sequence

<220>
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<220>
<221> VARIANT

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<222> (31)

<223> Xaa at position 31 is homoproline

<220>

<221> VARIANT

<222> (36)..(38)

<223> Xaa at positions 36, 37, and 38 is homoproline

<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 33

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25						30	

Ser	Gly	Ala	Xaa	Xaa	Xaa	Ser
						35

<210> 34

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> VARIANT

<222> (36)..(38)

<223> Xaa at positions 36, 37, and 38 is homoproline

<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 34

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25						30	

Ser	Gly	Ala	Xaa	Xaa	Xaa	Ser
						35

<210> 35

<211> 39

<212> PRT

<213> Artificial Sequence

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<220>
<223> Synthetic construct

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is thioproline

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is thioproline

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 35
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1             5             10             15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
      20             25             30

Ser Gly Ala Xaa Xaa Xaa Ser
      35

<210> 36
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is homoproline

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is homoproline

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 36
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1             5             10             15

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Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
 20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
 35

<210> 37
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> VARIANT
 <222> (31)
 <223> Xaa at position 31 is N-methylalanine

<220>
 <221> VARIANT
 <222> (36)..(38)
 <223> Xaa at positions 36, 37, and 38 is N-methylalanine

<220>
 <221> MOD_RES
 <222> (39)
 <223> AMIDATION, Position 39 is Ser-NH2

<400> 37
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
 35

<210> 38
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> VARIANT
 <222> (36)..(38)
 <223> Xaa at positions 36, 37, and 38 is N-methylalanine

<220>
 <221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 38

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

<210> 39

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> VARIANT

<222> (31)

<223> Xaa at position 31 is N-methylalanine

<220>

<221> VARIANT

<222> (36)..(38)

<223> Xaa at positions 36, 37, and 38 is N-methylalanine

<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 39

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

<210> 40

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 40
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 41
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 41
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 42
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 42
 His Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 43
 <211> 28

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 43
 His Gly Glu Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 44
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 44
 His Gly Glu Gly Thr Ala Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 45
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 45
 His Gly Glu Gly Thr Phe Thr Ala Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 46
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 46
 His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 47
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 47
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 48
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 48

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 49

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 49

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 50

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 50

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 51

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 51

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Ala Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 52

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 52

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Ala
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 53

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 53

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Ala Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 54
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 54
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Ala Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 55
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 55
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Ala Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 56
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 56

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Ala Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 57

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 57

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Ala Phe Leu Lys Asn
 20 25

<210> 58

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 58

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Asn
 20 25

<210> 59

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 59
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Ala Lys Asn
 20 25

<210> 60
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 60
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Ala Asn
 20 25

<210> 61
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Ala-NH2

<400> 61
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Ala
 20 25

<210> 62
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (38)
 <223> AMIDATION, Position 38 is Pro-NH2

<400> 62
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro
 35

<210> 63
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (38)
 <223> AMIDATION, Position 38 is Pro-NH2

<400> 63
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro
 35

<210> 64
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (37)
 <223> AMIDATION, Position 37 is Pro-NH2

<400> 64
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro
 35

<210> 65
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (37)
 <223> AMIDATION, Position 37 is Pro-NH2

<400> 65
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro
 35

<210> 66
 <211> 36
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (36)
 <223> AMIDATION, Position 36 is Pro-NH2

<400> 66
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro
 35

<210> 67
 <211> 36
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (36)
 <223> AMIDATION, Position 36 is Pro-NH2

<400> 67
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro
 35

<210> 68
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (35)
 <223> AMIDATION, Position 35 is Ala-NH2

<400> 68
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala
 35

<210> 69
 <211> 35

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (35)
 <223> AMIDATION, Position 35 is Ala-NH2

<400> 69
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala
 35

<210> 70
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (34)
 <223> AMIDATION, Position 34 is Gly-NH2

<400> 70
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly

<210> 71
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES

<222> (34)

<223> AMIDATION, Position 34 is Gly-NH2

<400> 71

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly

<210> 72

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (33)

<223> AMIDATION, Position 33 is Ser-NH2

<400> 72

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser

<210> 73

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (33)

<223> AMIDATION, Position 33 is Ser-NH2

<400> 73

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 , 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser

<210> 74
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (32)
 <223> AMIDATION, Position 32 is Ser-NH2

<400> 74
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

<210> 75
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (32)
 <223> AMIDATION, Position 32 is Ser-NH2

<400> 75
 His Gly Glu Gly Thr Phe Thr Sér Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

<210> 76
 <211> 31
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES

<222> (31)

<223> AMIDATION, Position 31 is Pro-NH2

<400> 76

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
20 25 30

<210> 77

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (31)

<223> AMIDATION, Position 31 is Pro-NH2

<400> 77

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro
20 25 30

<210> 78

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (30)

<223> AMIDATION, Position 30 is Gly-NH2

<400> 78

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly
20 25 30

<210> 79

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (29)

<223> AMIDATION, Position 29 is Gly-NH2

<400> 79

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly
20 25

<210> 80

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (29)

<223> AMIDATION, Position 29 is Gly-NH2

<400> 80

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly
20 25

<210> 81

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> VARIANT

<222> (31)

<223> Xaa is thioproline

<220>

<221> VARIANT

<222> (36)..(38)

<223> Xaa is thioproline

<220>
 <221> MOD_RES
 <222> (38)
 <223> AMIDATION, Position 38 is thioproline-NH2

<400> 81
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa Xaa
 35

<210> 82
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> VARIANT
 <222> (36)..(38)
 <223> Xaa is thioproline

<220>
 <221> MOD_RES
 <222> (38)
 <223> AMIDATION, Position 38 is thioproline-NH2

<400> 82
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Xaa Xaa Xaa
 35

<210> 83
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> VARIANT
 <222> (31)
 <223> Xaa is N-methylalanine

<220>
 <221> MOD_RES
 <222> (37)
 <223> AMIDATION, Position 37 is Pro-NH2

 <400> 83
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Pro Pro
 35

<210> 84
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> VARIANT
 <222> (31)
 <223> Xaa is N-methylalanine

<220>
 <221> VARIANT
 <222> (36)..(37)
 <223> Xaa is N-methylalanine

<220>
 <221> MOD_RES
 <222> (37)
 <223> AMIDATION, Position 37 is N-methylalanine-NH2

<400> 84
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa
 35

<210> 85
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
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 <222> (31)
 <223> Xaa is homoproline

<220>
 <221> VARIANT
 <222> (36)..(37)
 <223> Xaa is homoproline

<220>
 <221> MOD_RES
 <222> (37)
 <223> AMIDATION, Position 37 is homoproline-NH2

<400> 85
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa
 35

<210> 86
 <211> 36
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
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 <222> (31)
 <223> Xaa is homoproline

<220>
 <221> VARIANT
 <222> (36)
 <223> Xaa is homoproline

<220>
 <221> MOD_RES
 <222> (36)
 <223> AMIDATION, Position 36 is homoproline-NH2

<400> 86
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30

Ser Gly Ala Xaa
 35

<210> 87
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (35)
 <223> AMIDATION, Position 35 is Ala-NH2

<400> 87
 Arg Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala
 35

<210> 88
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (30)
 <223> AMIDATION, Position 30 is Gly-NH2

<400> 88
 His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
 20 25 30

<210> 89
 <211> 28
 <212> PRT
 <213> Artificial Sequence

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<220>
<223> Synthetic construct

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<222> (6)
<223> Xaa is naphthylalanine

<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 89
His Gly Glu Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1          5          10          15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
          20          25

<210> 90
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 90
His Gly Glu Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
1          5          10          15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
          20          25

<210> 91
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

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<400> 91

His Gly Glu Gly Thr Phe Ser Thr Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 92

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 92

His Gly Glu Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Ala Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 93

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> VARIANT

<222> (10)

<223> Xaa is pentylglycine

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 93

His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 94

<211> 28

<212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <221> VARIANT
 <222> (22)
 <223> Xaa is naphthylalanine

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 94
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Xaa Ile Glu Phe Leu Lys Asn
 20 25

<210> 95
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> VARIANT
 <222> (23)
 <223> Xaa is tertiary-butylglycine

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 95
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn
 20 25

<210> 96
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 96

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Asp Phe Leu Lys Asn
20 25

<210> 97

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (33)

<223> AMIDATION, Position 33 is Ser-NH2

<400> 97

His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser

<210> 98

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (29)

<223> AMIDATION, Position 29 is Gly-NH2

<400> 98

His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly
20 25

<210> 99
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
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 <222> (31)
 <223> Xaa is homoproline

<220>
 <221> VARIANT
 <222> (36)..(37)
 <223> Xaa is homoproline

<220>
 <221> MOD_RES
 <222> (37)
 <223> AMIDATION, Position 37 is homoproline-NH2

<400> 99
 His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa
 35

<210> 100
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 100
 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 101
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 101
 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 102
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 102
 His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 103
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 103

His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 104

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 104

Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 105

<211> 28

<212> PRT

<213> Artificial Sequence (

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 105

His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 106

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

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<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 106
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1          5          10          15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
          20          25

<210> 107
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 107
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1          5          10          15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
          20          25

<210> 108
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 108
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
1          5          10          15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
          20          25

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<210> 109
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 109
 Ala Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 110
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 110
 Ala Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 111
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 111

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 112

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 112

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 113

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 113

Ala Gly Asp Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 114

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

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<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 114
Ala Gly Asp Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1          5          10          15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
          20          25

<210> 115
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
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<222> (6)
<223> Xaa is naphthylalanine

<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 115
Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1          5          10          15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
          20          25

<210> 116
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
<221> VARIANT
<222> (6)
<223> Xaa is naphthylalanine

<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

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<400> 116

Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 117

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 117

Ala Gly Asp Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 118

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 118

Ala Gly Asp Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 119

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 119

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ala	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20					25			

<210> 120

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 120

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ala	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 121

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 121

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Ala	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20					25			

<210> 122
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 122
 Ala Gly Asp Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 123
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 123
 Ala Gly Asp Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 124
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 124

Ala Gly Asp Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 125

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 125

Ala Gly Asp Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 126

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 126

Ala Gly Asp Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 127

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>
 <221> VARIANT
 <222> (10)
 <223> Xaa is pentylglycine

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 127
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 128
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> VARIANT
 <222> (10)
 <223> Xaa is pentylglycine

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 128
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 129
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 129

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 130

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 130

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 131

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 131

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 132

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 132

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 133

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 133

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 134

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 134

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 135
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 135
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 136
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 136
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 137
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> VARIANT
 <222> (14)
 <223> Xaa is pentylglycine


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<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 137
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
1           5           10           15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
          20           25

<210> 138
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
<221> VARIANT
<222> (14)
<223> Xaa is pentylglycine

<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 138
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
1           5           10           15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
          20           25

<210> 139
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 139
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Ala Glu
1           5           10           15

```

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 140
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 140
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Ala Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 141
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 141
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Ala
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 142
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 142

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Ala
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 143

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 143

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Ala Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 144

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 144

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Ala Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 145

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 145

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Ala Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 146

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 146

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Ala Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 147

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 147

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Ala Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 148
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 148
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Ala Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 149
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 149
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Ala Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 150
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 150

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Ala Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 151

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> VARIANT

<222> (22)

<223> Xaa is naphthylalanine

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 151

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu Lys Asn
 20 25

<210> 152

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> VARIANT

<222> (22)

<223> Xaa is naphthylalanine

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 152

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Xaa Ile Glu Phe Leu Lys Asn
 20 25

<210> 153
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 153
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Val Glu Trp Leu Lys Asn
 20 25

<210> 154
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 154
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Val Glu Phe Leu Lys Asn
 20 25

<210> 155
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> VARIANT

<222> (23)

<223> Xaa is tertiary-butylglycine

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 155

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Xaa	Glu	Trp	Leu	Lys	Asn
			20					25			

<210> 156

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> VARIANT

<222> (23)

<223> Xaa is tertiary-butylglycine

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2

<400> 156

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Xaa	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 157

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Asn-NH2


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<400> 157
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1          5          10          15
```

Glu Ala Val Arg Leu Phe Ile Asp Trp Leu Lys Asn
20 25

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<210> 158
<211> 28
<212> PRT
<213> Artificial Sequence
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<220>
<223> Synthetic construct
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<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2
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<400> 158
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Asp Phe Leu Lys Asn
20 25

```
<210> 159
<211> 28
<212> PRT
<213> Artificial Sequence
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<220>
<223> Synthetic construct

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<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2
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<400> 159
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Asn
20 25

```
<210> 160
<211> 28
<212> PRT
<213> Artificial Sequence
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<220>
<223> Synthetic construct

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<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 160
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1          5          10          15

Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Asn
          20          25

<210> 161
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 161
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1          5          10          15

Glu Ala Val Arg Leu Phe Ile Glu Trp Ala Lys Asn
          20          25

<210> 162
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<220>
<221> MOD_RES
<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

<400> 162
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1          5          10          15

Glu Ala Val Arg Leu Phe Ile Glu Phe Ala Lys Asn
          20          25

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<210> 163
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 163
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Ala Asn
 20 25

<210> 164
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Asn-NH2

<400> 164
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Ala Asn
 20 25

<210> 165
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (28)
 <223> AMIDATION, Position 28 is Ala-NH2

<400> 165

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Ala
 20 25

<210> 166

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (28)

<223> AMIDATION, Position 28 is Ala-NH2

<400> 166

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Ala
 20 25

<210> 167

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (38)

<223> AMIDATION, Position 38 is Pro-NH2

<400> 167

Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro
 35

<210> 168

<211> 38

<212> PRT

<213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (38)
 <223> AMIDATION, Position 38 is Pro-NH2

<400> 168
 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro
 35

<210> 169
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (37)
 <223> AMIDATION, Position 37 is Pro-NH2

<400> 169
 His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro
 35

<210> 170
 <211> 36
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (36)
 <223> AMIDATION, Position 36 is Pro-NH2

<400> 170

His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro
 35

<210> 171

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (36)

<223> AMIDATION, Position 36 is Pro-NH2

<400> 171

Ala Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro
 35

<210> 172

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (35)

<223> AMIDATION, Position 35 is Ala-NH2

<400> 172

Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala
 35

<210> 173
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (35)
 <223> AMIDATION, Position 35 is Ala-NH2

<400> 173
 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala
 35

<210> 174
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (34)
 <223> AMIDATION, Position 34 is Gly-NH2

<400> 174
 His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly

<210> 175
 <211> 33
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (33)
 <223> AMIDATION, Position 33 is Ser-NH2

 <400> 175
 His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

 Ser

<210> 176
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

 <220>
 <221> MOD_RES
 <222> (32)
 <223> AMIDATION, Position 32 is Ser-NH2

<400> 176
 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

<210> 177
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

 <220>
 <221> MOD_RES
 <222> (32)
 <223> AMIDATION, Position 32 is Ser-NH2

<400> 177
 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

<210> 178
 <211> 31
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (31)
 <223> AMIDATION, Position 31 is Pro-NH2

<400> 178
 His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
 20 25 30

<210> 179
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (30)
 <223> AMIDATION, Position 30 is Gly-NH2

<400> 179
 His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly
 20 25 30

<210> 180
 <211> 29
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (29)
 <223> AMIDATION, Position 29 is Gly-NH2

<400> 180

Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly
 20 25

<210> 181

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> VARIANT

<222> (31)

<223> Xaa is thioproline

<220>

<221> VARIANT

<222> (36)..(38)

<223> Xaa is thioproline

<220>

<221> MOD_RES

<222> (38)

<223> AMIDATION, Position 38 is thioproline-NH2

<400> 181

His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30

Ser Gly Ala Xaa Xaa Xaa
 35

<210> 182

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> VARIANT

<222> (36)..(38)

<223> Xaa is thioproline

<220>

<221> MOD_RES

<222> (38)

<223> AMIDATION, Position 38 is thioproline-NH2

<400> 182

His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa
35

<210> 183

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> VARIANT

<222> (31)

<223> Xaa is N-methylalanine

<220>

<221> VARIANT

<222> (36)..(37)

<223> Xaa is N-methylalanine

<220>

<221> MOD_RES

<222> (37)

<223> AMIDATION, Position 37 is N-methylalanine-NH2

<400> 183

His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa
35

<210> 184

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>
 <221> VARIANT
 <222> (31)
 <223> Xaa is homoproline

<220>
 <221> VARIANT
 <222> (36)
 <223> Xaa is homoproline

<220>
 <221> MOD_RES
 <222> (36)
 <223> AMIDATION, Position 36 is homoproline-NH2

<400> 184
 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa
 35

<210> 185
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MOD_RES
 <222> (35)
 <223> AMIDATION, Position 35 is Ala-NH2

<400> 185
 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala
 35

<210> 186
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>

<221> MOD_RES

<222> (30)

<223> AMIDATION, Position 30 is Gly-NH2

<400> 186

His Gly Asp Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
20 25 30

<210> 187

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 187

Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 188

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic constructArtificial Sequence

<220>

<221> MOD_RES

<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 188

Ala Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 189

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> GLP-1[7-36] NH2 peptide

<220>

<223> c-term amidated

<400> 189

His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu	Gly
1				5					10				15		

Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	Lys	Gly	Arg
			20					25					30